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21369	7590	11/02/2007		
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DR. SUITE 101 RESTON, VA 20191			EXAMINER DAGER, JONATHAN M	
			ART UNIT 3663	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/757,462	<b>Applicant(s)</b> MORITA ET AL.	
	<b>Examiner</b> Jonathan M. Dager	<b>Art Unit</b> 3663	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6, 9, 11, 13 and 15-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 9, 11, 13, and 15-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see page 12, last paragraph, filed 08 August 2007, with respect to the rejection of claims 1, 2, 4, 6, 9, 11, and 13 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, have been fully considered and are persuasive due to amendment of said claims. The rejection of claims 1, 2, 4, 6, 9, 11, and 13 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, has been withdrawn.

Applicant's arguments, see pages 13-19, filed 08 August 2007, with respect to the rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Obata et al. (US 2002/0123840) in view of Hisano (US 2004/0204032), have been fully considered and are persuasive. The rejection of claim 1 under 35 U.S.C. 103(a) has been withdrawn in light of the amendments to the claim.

However, new grounds for rejection are necessitated by the amendments to independent claim 1. See below.

Applicant's arguments with respect to claims 2-4, 6, 9, 11, and 13 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment to the claim(s).

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***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6, 9, 11, 13, 15-17, and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffee et al. (US 6,611,755), in view of Fujinuma et al. (US 2004/0122561)

Regarding claims 1-4, and 16, Coffee et al. discloses a vehicle fleet management information system, which identifies location and direction of movement of each vehicle in a fleet in real-time, and automatically reports such information, as well as status of predetermined events in which the vehicle is engaged, directly to the fleet manager. Each fleet vehicle has an assigned time slot to transmit its reporting information over a communications network without interfering with transmissions from other vehicles in their own respective time slots. A timing control phase lock loop (PLL) provides precise time synchronization for timing corrections from a global positioning system (GPS) based time reference. A dual band full-duplex interface of the network has TDMA on one-half and broadcast on the other half. Microprocessor time processing units in components of the network perform precise clock synchronization. Space diversity performed on received vehicle transmitted messages avoids data corruption. Different vehicles have different periodic transmission intervals, by

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dynamically allocating the slots for various update rates. Auxiliary reporting slots enable prompt reporting of important data by the respective vehicle transmitters independent of the slower periodic transmission intervals (abstract).

Further, Coffee discloses that the fleet management system comprises a Mobile Data Terminal (tracker), and that antennas can be placed on a construction vehicle (figure 23).

3. Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. See MPEP 2125.

Coffee next discloses that all trackers are assigned a 30 bit tracker ID at the factory, unique throughout the PROTRAK system. While this could be the only ID used to identify a tracker, a shorter ID is assigned to trackers when they receive their main repeating interval slot assignment, which allows the NDC Server to identify trackers in its RF network grid with fewer data bits. The shorter IDs consist of a Network ID and an Interface ID. Since two network sizes are used, the most significant bit of the 16 bit ID is used to indicate the network size (column 18 lines 33-40).

Also, Coffee discloses that the servers assign reporting intervals and time slots to vehicles so that they can send data and status changes automatically. Typical periodic updates of navigation data or other non-critical information are provided at two to three minute intervals; it is impractical for the vehicle computer

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(tracker) to wait for a periodic interval of that length to send time critical event data (column 3 lines 48-62).

Typical periodic updates of navigation data and other non-critical information are provided at two to three minute intervals. However, it is not practical for the tracker to wait for periodic intervals of that length to send time critical event data. Accordingly, for such events, the network maintains a number of time slots for additional access to the network on request of any vehicle needing to transmit event data. The requesting vehicle is then granted sufficient auxiliary reporting times at twelve second intervals to send its data. The total latency between an event being detected and the transmission of data is kept under thirty seconds (column 5 lines 23-33).

Coffee lastly discloses that the NDC runs two server applications, namely, an NDC Server 32 that provides real-time information to connected customers, and a tracking data log server 33 that collects tracking information from the system in real-time and stores it in a large capacity database, with additional capability to respond to queries for historical tracking data (column 10 lines 32-37).

Coffee discloses all of these embodiments, but states that the Wireless Network Computer, and not the MDT, contains the unique and fixed identifier. The MDT by itself is a small conventional programmable computer similar to but generally smaller than a notebook PC (with customer-specific software) and display terminal with liquid crystal display (LCD), keypad, associated memory, and internal (integrated) circuitry, to enable display of text and other data, and to

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enable the vehicle operator to respond to text paging messages and to enter other data to be transmitted to the dispatcher (column 55 lines 1-9). Thus, Coffee does not explicitly disclose the MDT having a fixed and unique identifier.

4. Fujinuma, however, teaches a system in which a job condition and the contents of the job by the staff member are recorded. The job master 17 comprises a job instruction table in which data which are related to a job ID for the job which is supposed to be done by a staff member such as (1) priority, (2) contents of the job, (3) job occurrence time, (4) instruction time, (5) job start time, (6) job completion time, (7) staff member ID, and (8) instruction condition, a staff member control table which is related to the staff member ID for controlling and identifying the staff member for recording the job data such as (1) **a portable terminal number**, (2) position information which is indicated by the disposition port, and furthermore, (3) job ID, (4) job condition, (5) job start time, (6) total job time, an inter-port transportation time table in which a standard transportation time for each inter-port distance for estimating a transportation time between the ports by the staff member is recorded, and a standard transportation time table in which a standard job time for each job is recorded for estimating the job time of the staff member (para 0037).

Thus, it would be obvious to one of ordinary skill in the art to modify the invention of Coffee with the teachings of Fujinuma to affix each mobile terminal with a fixed and unique identifier. Doing so would distinguish each terminal from the other.

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5. It is noted that the above claims contain multiple statements of intended use or field of use (e.g. "wherein...sets", "the server managing machine information", "wherein....interacts", etc.). These statements of intended use or field of use and "wherein" clauses are essentially method limitations or statements of intended or desired use. Thus, these claims as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference.

See MPEP § 2114 which states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from the prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than functions. Apparatus claims cover what a device is not what a device does.

As set forth in MPEP § 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Additionally, the terms "configured to" or "arranged to" are considered to be structurally modified statements and are not intended use. Claims amended to include the above listed language may patentably distinguish themselves structurally.

Regarding claim 6, 9, 11, 14, and 21, Coffee discloses that system allows the owner or dispatcher of the vehicle to define rectangular zones on a stored map of the metropolitan area of interest; for example, a zone 300 as shown in FIG. 34. The corners defining the zones (e.g., 301, 302, 303, 304 for zone 300) are sent to the vehicles so that the tracker can determine, based on its navigation



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solution, whether it is inside or outside any particular zone. These zones are typically set up to identify home or plant sites where vehicles are usually based or pick up cargo, or job sites where vehicles are usually dispatched to deliver cargo or perform a service (column 73 lines 39-49).

Further, Coffee discloses that zones can also define map regions for other purposes such as restricted speed, restricted weight, or borders that the vehicle is not allowed to cross. Using navigation alone, the tracker can report: Distance Traveled Between Zones Engine On and Off Driving Over a Specified Speed Driving at Inappropriate Times Unauthorized Stops Times of Arrival and Departure to and from Specified Locations (column 73 lines 50-60)

Lastly, Coffee discloses that vehicle locating systems have been developed using Global Positioning System (GPS) satellite information, and, for greater accuracy, differential GPS (DGPS) systems.

As stated above, Coffee et al. discloses a vehicle fleet management information system, which identifies location and direction of movement of each vehicle in a fleet in real-time, and automatically reports such information, as well as status of predetermined events in which the vehicle is engaged, directly to the fleet manager. Each fleet vehicle has an assigned time slot to transmit its reporting information over a communications network without interfering with transmissions from other vehicles in their own respective time slots. A timing control phase lock loop (PLL) provides precise time synchronization for timing corrections from a global positioning system (GPS) based time reference. A dual band full-duplex interface of the network has TDMA on one-half and broadcast

on the other half. Microprocessor time processing units in components of the network perform precise clock synchronization. Space diversity performed on received vehicle transmitted messages avoids data corruption. Different vehicles have different periodic transmission intervals, by dynamically allocating the slots for various update rates. Auxiliary reporting slots enable prompt reporting of important data by the respective vehicle transmitters independent of the slower periodic transmission intervals (abstract).

Regarding claim 15, Coffee discloses that the servers assign reporting intervals and time slots to vehicles so that they can send data and status changes automatically. Typical periodic updates of navigation data or other non-critical information are provided at two to three minute intervals; it is impractical for the vehicle computer (tracker) to wait for a periodic interval of that length to send time critical event data (column 3 lines 58-64).

Accordingly, for such events, the network maintains a number of time slots for additional access to the network on request of any vehicle needing to transmit event data. The requesting vehicle is then granted sufficient auxiliary reporting times at twelve second intervals to send its data. The total latency between an event being detected and the transmission of data is kept under thirty seconds (column 5 lines 25-33).

Lastly, Coffee discloses that the NDC runs two server applications, namely, an NDC Server 32 that provides real-time information to connected customers, and a tracking data log server 33 that collects tracking information

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from the system in real-time and stores it in a large capacity database, with additional capability to respond to queries for historical tracking data (column 10 lines 31-38).

It is well known to those of ordinary skill in the art at the time of the invention that the periodic updating of information from the MDT on the vehicle would contain time/date tag, so as to determine when the event occurred, and that said tag would be logged at the NCC.

Regarding claim 17, Coffee discloses that the PROTRAK system provides the required vehicle and driver information together with a database management system that is capable of collecting such information and integrating it with data retrieved from the operator's other information systems in a database management application. This application can be used by the operator to generate reports that are tailored to its business and are based on all of the available data (abstract).

Coffee does not explicitly state that the MDT and tracker store vehicle data and computer identifier data separately, but rather, together

6. However, Fujinuma teaches that a job master 17 is a database in which a job condition and a contents of the job by the staff member are recorded. The job master 17 comprises a job instruction table in which data which are related to a job ID for the job which is supposed to be done by a staff member such as (1) priority, (2) contents of the job, (3) job occurrence time, (4) instruction time, (5) job start time, (6) job completion time, (7) staff member ID, and (8) instruction

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condition, a staff member control table which is related to the staff member ID for controlling and identifying the staff member for recording the job data such as (1) a portable terminal number, (2) position information which is indicated by the disposition port, and furthermore, (3) job ID, (4) job condition, (5) job start time, (6) total job time, an inter-port transportation time table in which a standard transportation time for each inter-port distance for estimating a transportation time between the ports by the staff member is recorded, and a standard transportation time table in which a standard job time for each job is recorded for estimating the job time of the staff member (para 0037).

Thus, it would be obvious to one of ordinary skill in the art to modify the system of Coffee with the teachings of Fujinuma to separate the terminal ID information from that of the vehicle under use; doing so would make the data logged specific to the vehicle, and not be tied to the terminal ID.

Regarding claims 18-20, and 23-25, Coffee discloses that the NDC server uses a "Network Entry Response" packet (Table 25) to respond to a tracker's network entry request when the tracker's service type does not otherwise permit network entry. The assigned tracker state code contained in this packet enables a tracker to determine its type and requirements to be assigned a repeating interval slot. Manual tracking trackers are to wait for a "Repeating Interval Slot Definition (Single Interval)" packet, and login-only tracking and unknown trackers must wait for a "Network Entry Request Permission" message. The NDC server 42 may send a "Network Entry Request Permission" message as a result of a

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CCS (e.g., 14, FIG. 3) connecting to the DMCS 27 or because an individual tracker's service type has changed (column 23 lines 25-37).

Further, Coffee discloses that Login-Only Track (LOT) trackers are assigned periodic transmit slots if the respective customer is logged in. Without a customer (i.e., fleet subscriber or owner) being logged in, these units will occasionally attempt to enter the network or remain quiet until notified by the NDC that their owner has logged in (column 50 lines 33-37).

It is well known to those of ordinary skill in the art that systems, such as those disclosed by Coffee, employ login-entry type terminals for reasons such as security, multiple customer use, etc.

Further, it is well known that upon logging in, saved user preferences are retrieved that would overwrite the previous user's data.

Thus, it would be obvious to use the system of Coffee, as modified by Fujinuma, to allow multiple subscribers access to the terminal via individual login to allow transfer of the system between the users.

Regarding claim 22 and 26, Coffee discloses all of the embodiments (see above rejection of claims 1-4, 16), and also discloses that when the tracker receives a new message (as well as at periodic intervals), it sends an "Available Message Data" message (7104, Table 60) to the MDT, indicative of the number of unread messages and the number of saved messages, as well as a unique ID for each message for use to retrieve a specific message from the tracker. Upon receipt of this message 7104, the MDT periodically beeps a speaker or other

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alert device (e.g., a lamp, LED, or the LCD display itself) within the MDT if the number of unread messages is not zero, to inform the vehicle operator of unread messages needing a response. Individual unread messages are retrievable from the tracker by the driver sending a Request Message (7205, Table 66) from the MDT (column 56 lines 30-44).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan M. Dager whose telephone number is 571-270-1332. The examiner can normally be reached on 0830-1800 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD

16 October 2007

  
JACK KEITH  
SUPERVISORY PATENT EXAMINER